



4160-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA-2013-N-0430]

510(k) Device Modifications: Deciding When to Submit a 510(k) for a Change to an Existing Device; Public Meeting; Request for Comments

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice of public meeting; request for comments.

Summary: The Food and Drug Administration (FDA) is announcing the public meeting entitled "510(k) Device Modifications: Deciding When to Submit a 510(k) for a Change to an Existing Device." The focus of this meeting is FDA's interpretation of its regulations concerning when a modification made to a 510(k)-cleared device requires a new 510(k) submission.

Date: The meeting will be held on June 13, 2013, from 9 a.m. to 5 p.m. EDT.

Address: The meeting will be held at FDA's White Oak Campus, 10903 New Hampshire Ave., Building 31 Conference Center, the Great Room (rm. 1503), Silver Spring, MD 20993-0002. Entrance for the public meeting participants (non-FDA employees) is through Building 1 where routine security check procedures will be performed. For parking and security information, please refer to

<http://www.fda.gov/AboutFDA/WorkingatFDA/BuildingsandFacilities/WhiteOakCampusInformation/ucm241740.htm>.

Contact Persons: For technical information: Michael J. Ryan, Center for Devices and Radiological Health, Food and Drug Administration, 301-796-6283, email: michael.ryan@fda.hhs.gov. For registration questions: Joyce Raines, Center for Devices and

Radiological Health, Food and Drug Administration, 301-796-5709, email:

joyce.raines@fda.hhs.gov.

Registration: Registration is free and available on a first-come, first-served basis.

Persons interested in attending this meeting must register online by 5 p.m. EDT, May 30, 2013.

Early registration is recommended because facilities are limited and, therefore, FDA may limit the number of participants from each organization. If time and space permits, onsite registration on the day of the meeting will be provided beginning at 8 a.m.

If you need special accommodations due to a disability, please contact Joyce Raines, 301-796-5709 or email: joyce.raines@fda.hhs.gov no later than 5 p.m. EDT, May 30, 2013.

To register for the meeting, please visit FDA's Medical Devices News & Events--Workshops & Conferences calendar at <http://www.fda.gov/MedicalDevices/NewsEvents/WorkshopsConferences/default.htm>. (Select this meeting from the posted events list.) Please provide complete contact information for each attendee, including name, title, affiliation, address, email, and telephone number. Those without Internet access should contact Joyce Raines to register (see Contact Persons). Registrants will receive confirmation after they have been accepted. You will be notified if you are on a waiting list.

Streaming Webcast of the Meeting: This meeting will also be available via Webcast. Persons interested in viewing the Webcast must register online by May 30, 2013, 5 p.m. EDT. Early registration is recommended because Webcast connections are limited. Organizations are requested to register all participants, but to view using one connection per location. Webcast participants will be sent technical system requirements after registration and will be sent connection access information after May 31, 2013. If you have never attended a Connect Pro

event before, test your connection at

https://collaboration.fda.gov/common/help/en/support/meeting_test.htm. To get a quick overview of the Connect Pro program, visit http://www.adobe.com/go/connectpro_overview.

(FDA has verified the Web site addresses in this document, but FDA is not responsible for any subsequent changes to the Web sites after this document publishes in the Federal Register.)

Requests for Oral Presentations: This meeting includes a public comment session and topic-focused sessions. During online registration you may indicate if you wish to present during a public comment session or participate in a specific session, and which topics you wish to address. FDA has identified general topics in this document. FDA will do its best to accommodate requests to make public comments and participate in the focused sessions. Individuals and organizations with common interests are urged to consolidate or coordinate their presentations, and request time for a joint presentation, or submit requests for designated representatives to participate in the focused sessions. Following the close of registration, FDA will determine the amount of time allotted to each presenter and the approximate time each oral presentation is to begin, and will select and notify participants by June 3, 2013. All requests to make oral presentations must be received by the close of registration on May 30, 2013, 5 p.m. EDT. If selected for presentation, all of your presentation materials must be emailed to Michael Ryan (see Contact Persons) no later than June 6, 2013. No commercial or promotional material will be permitted to be presented or distributed at the meeting.

Comments: FDA is holding this meeting to obtain information on its interpretation of the 510(k) device modifications regulations, and specifically, deciding when a 510(k) should be submitted for a change to a 510(k)-cleared device. To permit the widest possible opportunity to obtain public comment, FDA is soliciting either electronic or written comments on all aspects of

the meeting topics. FDA would like to receive these comments by May 30, 2013, so they can be discussed during the meeting; however, comments related to this meeting will be accepted until July 13, 2013.

Regardless of attendance at the meeting, interested persons may submit written comments regarding this document to the Division of Dockets Management (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852, or electronic comments to <http://www.regulations.gov>. It is necessary to send only one set of comments. Identify comments with the docket number found in brackets in the heading of this document. In addition, when responding to specific questions as outlined in section II of this document, please identify the question you are addressing. Received comments may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday, and will be posted to the docket at <http://www.regulations.gov>.

Transcript: Please be advised that as soon as a transcript is available, it will be accessible at <http://www.regulations.gov>. It may be viewed at the Division of Dockets Management (see Comments). A transcript will also be available in either hardcopy or on CD-ROM after submission of a Freedom of Information Act request. Written requests are to be sent to the Division of Freedom of Information (ELEM-1029), Food and Drug Administration, 12420 Parklawn Dr., Element Bldg., Rockville, MD 20857. A link to the transcript will also be available approximately 45 days after the meeting on the Internet at <http://www.fda.gov/MedicalDevices/NewsEvents/WorkshopsConferences/default.htm>. (Select this meeting from the posted events list.)

SUPPLEMENTARY INFORMATION:

I. Background

The Food and Drug Administration Safety and Innovation Act (FDASIA) became law on July 9, 2012. FDASIA added section 510(n)(2) to the Federal Food, Drug, and Cosmetic Act (FD&C Act) (21 U.S.C. 360(n)), which requires FDA to withdraw its 2011 draft guidance, "Deciding When to Submit a 510(k) for a Change to an Existing Device," and states that the 1997 final guidance of the same name shall be in effect until FDA issues a guidance or a regulation on the topic. Section 510(n) further requires FDA to submit a report not later than 18 months after the enactment of FDASIA to the Committee on Energy and Commerce of the House of Representatives and the Committee on Health, Education, Labor, and Pensions of the Senate on when a new 510(k) should be submitted to FDA for a modification or change to a legally marketed device. Under this provision, the report must address the interpretation of several phrases in 21 CFR 807.81(a)(3) (the regulation governing submission of 510(k)s for changed or modified devices), possible processes for industry to use to determine whether a new 510(k) is required, and how to leverage existing quality system requirements to reduce premarket burden, facilitate continual device improvement, and provide reasonable assurance of safety and effectiveness of modified devices. FDA is holding this public meeting to solicit input on these issues from all interested stakeholders.

II. Topics for Discussion at the Meeting

FDA invites public input on its interpretation of its regulations concerning when a new 510(k) is required for a change to a 510(k)-cleared device. This input will be used to formulate FDA's report to Congress, as well as any future guidance on this topic. FDA would like to solicit comments on the following policy options, both in the form of submissions to the docket for this

Federal Register notice and in discussion during the public meeting. Please note that implementation of some of these options may require regulatory changes beyond a guidance document.

A. Risk Management

Industry members have proposed use of risk management in the decision process on whether a medical device modification requires a new 510(k) submission. FDA would like to solicit specific, detailed, and practicable proposals that incorporate risk management into this decision process in a way that ensures appropriate and consistent modification decisions by industry and FDA staff. Appropriate decisions in this context are those that allow for both medical device innovation and effective FDA oversight of device changes. Consistent results are a key consideration, as these decisions must be made by many different types of medical device companies and by different FDA review divisions. Inconsistent decisions will make policy unclear and unpredictable for those making future decisions. Proposals must ensure consistency of 510(k) modifications policy, and address and resolve the following concerns.

1. Risk Management is a Process--Published risk management standards and guides, such as the International Organization of Standardization's (ISO's) 14971:2007, "Medical devices--Application of risk management to medical devices," are not designed to produce a determination on whether a modified device requires a 510(k). How can risk management be tied to a decision on whether a modification requires a new 510(k)? More specifically, how can FDA tie risk management to the decision that a change or modification in a device is one that could significantly affect the safety or effectiveness of the device? Provide examples of different devices and how the suggested tie between risk management and 510(k) modifications would result in consistent decision making.

2. There are Many Different Ways to do Risk Management--FDA's risk analysis process is described in the preamble to 21 CFR part 820, the Quality System Regulation, at 61 FR 52620 (October 7, 1996), in the response to comment 83. Although FDA's risk analysis process is similar to some documented risk management processes, there are many other ways to conduct risk management and still meet FDA requirements. Even ISO 14971, one of the more common risk management guides, allows for flexibility in its processes such that different manufacturers following ISO 14971 could conceivably reach different risk management decisions for similar device changes. How can a single risk management process be chosen that leads to consistent and appropriate decisions on whether a 510(k) is required for a device modification?

3. Risk Management Analyses Inherently Involve Subjectivity--Risk management requires the manufacturer to: (1) Establish "criteria for risk acceptability, based on the manufacturer's policy for determining acceptable risk," (2) predict known and foreseeable hazards associated with the device, (3) estimate the risks for each hazard, and (4) evaluate the risks of each associated hazard using the manufacturer's established criteria. ISO 14971. FDA is not aware of universally accepted risk acceptability criteria for medical devices. Furthermore, it is often difficult to find objective data to help determine frequency and even severity of risk, which often leads to inconsistent risk analyses. How can the inherent subjectivity of risk management be controlled to ensure consistent and appropriate decisions on whether a 510(k) is required for a device modification?

4. A Company's Risk Management Processes are Contained Within its Overall Quality System and May Not be Specifically Scrutinized by FDA During 510(k) Reviews--To consider integration of risk management in the 510(k) modification decision-making process, FDA must

have assurance that a company's risk management process is comprehensive and appropriately implemented. How can FDA obtain such assurance?

B. Reliance on Design Control Activities

FDA is soliciting proposals for how industry and FDA could utilize design control activities such as design verification and validation to ensure that device modifications are appropriately evaluated prior to marketing. FDA would need some form of effective oversight in this process to properly perform its function of protecting the public health. The Agency would need the opportunity to review design control activities when necessary because improper application of these activities may lead to incomplete or inaccurate evaluations of design changes and the marketing of unsafe or ineffective devices. At this time, FDA generally reviews design control information for 510(k)-eligible devices only during inspections, and inspections do not necessarily focus on the specific information (such as design specifications, testing protocols, etc.) that FDA needs to review to ensure that design changes are properly evaluated. Inspection resources are also limited. Any proposal for reliance on design control activities as part of FDA's 510(k) modifications policy should consider how FDA may ensure effective oversight. Input on the following specific questions is requested.

1. FDA Does Not Typically Review Design Control Information Prior to Marketing Clearance and Resource Issues, Among Other Things, Limit the Extent of its Review of Design Control Information--How can FDA ensure that design control activities will limit the potential for marketing of device modifications that may be unsafe or ineffective?
2. Although 21 CFR 820.30 Imposes the Same Design Control Requirements on All Medical Device Manufacturers, the Ways in Which Manufacturers Comply with These Requirements

Vary--How can FDA ensure consistency in use of design controls to ensure that only safe and effective modified devices are marketed?

C. Critical Specifications

Industry members have proposed the use of critical specifications, a new concept, to make decisions on whether a 510(k) is required for a device modification easier. This concept would be one way that FDA could link use of design control activities to 510(k) modification decisions.

Under this proposal, if FDA and manufacturers can identify essential device specifications--critical specifications--and can agree on limits and testing protocols for those specifications within a 510(k), then a device manufacturer may make modifications to a device, and as long as the resulting device remains within the agreed-upon limits for all of the critical specifications, no new 510(k) would be required for that modified device. This approach could allow FDA to rely on the quality system regulation to ensure that qualifying changes could not significantly affect safety and effectiveness because there was no change to a critical specification. FDA would like to discuss the feasibility of this approach, both for manufacturers and FDA's review staff, and how it might be implemented. It is important to note that this approach would not apply to changes to intended use or labeling, as those aspects of a device are not associated with specifications.

Critical specifications could include a range of technological and material design aspects, such as dimensional specifications, shelf life, or material purity. Critical specifications would necessarily be device specific, so it would be impossible to identify all of the possible specifications in guidance, although FDA guidance could note useful examples. To qualify as a critical specification, FDA and the 510(k) submitter would have to agree on the identity and

parameters of a critical specification within a 510(k) review. The manufacturer would have to clearly identify types of changes that might be made, which specifications it would designate as critical for those types of changes, and specification bounds or tolerances. For example, if a manufacturer anticipates possible changes in materials for an implant (e.g., due to supplier changes that may occur post-clearance), then it might wish to designate tensile strength of the material as a critical specification. It would then set parameters for properties that the new material needs to meet; for instance, tensile strength must be $950 \text{ MPa} \pm 15 \text{ MPa}$ (megapascals). The 510(k) would also describe how tensile strength would be tested. FDA reviewers would need to consider whether any other properties should be identified as critical specifications for the type of change in question, and whether appropriate test methods have been identified to ensure the modified device will meet its critical specifications. Voluntary consensus standards (such as those recognized on FDA's Web site in its recognized standards database at <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStandards/search.cfm>) could be used to determine critical specifications and their parameters or testing protocols. If critical specifications are agreed on prior to 510(k) clearance, then a manufacturer who modifies its device after clearance would be able to do so without submission of a new 510(k) as long as the agreed-upon verification and validation activities show those critical specifications are unchanged.

To take advantage of this approach, manufacturers would have to identify the following in their 510(k) submissions:

- A list of potential changes that might be made;

- Critical specifications for each change: Those device specifications--physical, material, or performance--that are essential to safe and effective use of the device (e.g., tensile strength);
- Bounds for those specifications that a changed device must remain within (e.g., 950 MPa \pm 15 MPa); and
- The verification and validation test protocols that will be used to examine those specifications pre- and post-modification, within the rubric of the quality system regulation.

FDA's review staff would be responsible for reviewing the above information and determining whether a change that results in a device that remains within the identified specifications could significantly affect safety or effectiveness.

FDA is soliciting input on the feasibility of the critical specifications approach and proposals for how FDA could implement such a program. Input on the following specific questions is requested.

1. How could critical specifications be incorporated into FDA's review process? Review of critical specifications proposals in 510(k)s will require additional review time and resources. How should situations where agreement cannot be reached within review timeframes be handled? How could situations where FDA is ready to proceed with a substantial equivalence decision, but critical specifications have not been agreed upon, be handled?
2. How could critical specifications agreements be documented? Should they be summarized in 510(k) Summaries or substantial equivalence letters?
3. Should use of critical specifications be limited to certain types of changes? If so, which ones?

4. Are there particular specifications that could be deemed critical for all devices? If so, which ones?
5. Could critical specifications be implemented as an optional paradigm? This approach could potentially be implemented as an optional approach that manufacturers could use where it is most efficient; manufacturers that chose not to identify critical specifications in a 510(k) would then be subject to the current 510(k) modifications decision-making paradigm. Please discuss the practical implications of this approach.

D. Risk-Based Stratification of Medical Devices for 510(k) Modifications Purposes

FDA is seeking comments on the practicality of stratifying device types that require 510(k)s by risk. Under such a framework, FDA would expect 510(k)s for modifications of higher risk devices that meet the standard in 21 CFR 807.81(a)(3). For lower risk devices, FDA would not expect 510(k)s for all modifications that meet the standard in 807.81(a)(3). However, because modifications to lower risk devices could still result in harm or injury, FDA would expect 510(k)s for certain modifications (for example, changes to the indications for use) even if the device is lower risk. FDA could require some other measure, such as periodic reporting, for modifications of lower risk devices that are not submitted in 510(k)s. This approach would allow FDA to focus review resources on areas that are more important from a public health perspective. Comments on this approach should address the following questions.

1. How should FDA delineate higher versus lower risk devices? For example, would higher risk devices include only those designated as life sustaining, life supporting, or implants?
2. Should FDA require some other measure, such as periodic reports, for modified lower risk devices in lieu of 510(k) submissions?

3. Because modifications to lower risk devices could still result in harm or injury, FDA believes that some modifications to lower risk devices should still be reviewed in 510(k) submissions prior to marketing. How should FDA delineate which lower risk device modifications require 510(k)s and which do not?

E. Periodic Reporting

FDA is soliciting comments on the advisability of requiring periodic reporting for modifications to 510(k)-cleared devices that do not require new 510(k) submissions. FDA does not typically review 510(k) modifications decisions that do not result in 510(k) submissions, unless that information is specifically looked at during an inspection or submitted in conjunction with future changes that do require a 510(k). If manufacturers were required to submit periodic reports identifying and describing their design changes that did not result in 510(k) submissions, FDA would then review these changes and ensure that decisions were made appropriately. This process would likely be similar to annual reporting of device changes for approved class III devices. Over time, periodic reporting would give FDA a more complete picture of the changes industry is making to 510(k)-cleared devices, and may allow FDA to tailor 510(k) modifications requirements to ensure that the Agency is reviewing only the changes it needs to in new 510(k) submissions. Review of periodic reports, however, would require additional FDA resources.

Comments on periodic reporting should address the following questions.

1. How often should FDA require periodic reports, e.g., annually, biannually, etc.?
2. Should FDA require periodic reports for all 510(k) devices or only certain devices? If not all devices, then which ones?
3. What information should be included in a periodic report?

F. Other Policy Proposals

FDA acknowledges that any one of the above options may be insufficient on its own; if any changes are made to FDA's 510(k) modification policy, the Agency may adopt a combination of those options. FDA also acknowledges that other options may exist that have not been identified above. FDA is therefore soliciting any other proposals for revising the Agency's 510(k) modification policy. Any policy must ensure:

- Consistent decision-making by both industry and FDA;
- Adequate control of device modifications that could significantly affect safety or effectiveness; and
- Effective FDA oversight of modifications to 510(k)-cleared devices to adequately protect the public health and allow for medical device innovation.

Proposals should be as detailed and specific as possible, and should take into account the issues discussed above in the individual options.

G. Examples

In addition to the options discussed above, FDA is seeking specific examples of device changes that manufacturers have made that should not trigger the requirement for a new 510(k) submission, with explanations as to why 510(k) submissions should not be required. These examples will help FDA develop an appropriate 510(k) modifications policy. FDA typically sees only those device modifications that result in new 510(k) submissions; device changes that do not result in new 510(k) submissions generally are not reviewed by the Agency. Industry provision of these changes will help inform FDA's 510(k) modifications interpretation.

Examples of device changes may also be used for discussion during this public meeting. All examples discussed publicly will be de-identified. Examples may be submitted to the Agency in de-identified form through third parties such as trade associations.

Dated: May 2, 2013.

Leslie Kux,

Assistant Commissioner for Policy.

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